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PHYSICS AND ASTRONOMY CLASSIFICATION SCHEME (PACS)

Shortened version for use in classifying papers for Applied Physics

General

02 Mathematical methods in physics
06 Measurement science and metrology
07 Specific instrumentation
- 07.60 Optical instruments and techniques, detection of radiation
- 07.65 Optical spectroscopy and spectrometers
- 07.75 Mass spectrometers and mass-spectroscopy techniques
- 07.80 Electron and ion microscopes and spectrometers; techniques
- 07.85 X-ray and gamma-ray instruments and techniques

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33 Molecular spectra and interactions of molecules with photons
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35 Experimentally derived information on atoms and molecules
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- 42.30 Optical information, image formation and analysis
- 42.40 Holography
- 42.50 Quantum optics
- 42.55 Laser processes
  - C *Pumping mechanisms*
  - E *Molecular gas lasers* (CO_2, CO, N_2O, *formaldehyde*)
  - G *Excimer lasers*
  - H *Atomic, ionic, and other gas lasers*
  - M *Laser action in liquids and organic dyes*
  - P *Laser action in semiconductors*
  - R *Laser action in solid-state lasers*
  - T *Free-electron lasers*
- 42.60 Laser systems and laser-beam applications
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  - D *Laser resonators, cavities, and amplifiers*
  - E *Laser beam deflection and focusing*
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